

Remarks Distinguishing Spears

Claims 1-12, 14-16 and 18-19 were rejected in the parent case as being obvious over Spears (6,304,981) alone or Spears in view of Bender (5,791,790). Spears teaches continually computing the time necessary to store all volatile information on a server or other computer system to a non-volatile location and then delaying shutdown until this time has elapsed, to ensure a safe shutdown. Spears does not teach or suggest anything about a peripheral device handling tasks that are already queued when a change in the power supplied to the peripheral device is detected, as in the claimed invention. Claim 1, for example, requires calculating the amount of energy required to perform a task queued for a peripheral device and then performing the task if sufficient energy is available or storing data describing the task if sufficient energy is not available.

Spears Does Not Teach Or Suggest Calculating Energy Requirements And Taking Alternative Actions Based On The Calculating.

Claim 1 recites "calculating the amount of energy required for said at least one task." The Examiner acknowledges that Spears does not teach this element. Rather, Spears teaches "automatically determining the time interval required for the information handling system to reach a safe shutdown.... " E.g., Spears, column 5, lines 47-50. Claim 1 also requires performing the task if there is sufficient energy to do so or storing data describing the task if there is insufficient energy to perform the task. In support of the rejection, the Examiner equates the shutdown tasks in Spears with the queued task in Claim 1. Assuming there is such an equivalence (for purposes of argument only), Spear teaches only performing the shutdown tasks -- Spears does not contemplate storing data describing the **tasks** to non-volatile memory if insufficient energy is available to perform those tasks. **Spears teaches always performing the shutdown tasks.** Hence, Spears does not and cannot teach or suggest the storing element in Claim 1.

The Examiner cites to Spears, column 5, lines 45-55, to support her assertion that Spears teaches the storing element of Claim 1. This passage in Spears teaches moving information from volatile memory to non-volatile memory as one of the shutdown tasks. With all due respect, the Examiner seems to be confusing performing a task with storing data describing the task for subsequent performance

of that task. The Examiner states that "The completing of the safe shutdown is interpreted as the one task." If that is true, then storing information in non-volatile memory in Spears, which is part of the safe shutdown "task", is **performing** the task, not **storing data describing** the task.

This fundamental distinction between Spears and the claimed invention is also evident in the energy calculation element of Claim 1. The Examiner asserts incorrectly that it would be obvious to calculate energy (as in Claim 1) instead of time (as in Spears). Spears calculates the time it takes for a safe shutdown and then delays shutdown until that time has elapsed. Apparently, Spears assumes there will be enough electrical energy available to perform all shutdown tasks. Spears doesn't teach or suggest any contingency plan in case there is not enough energy to perform all shutdown tasks, as in the storing element of Claim 1. Spears doesn't calculate the amount of energy it will take to perform any or all of the shutdown tasks and, consequently, Spears will never know if there is enough energy available to perform any or all of the shutdown tasks. There is nothing in Spears, ABSOLUTELY NOTHING, that suggests or even contemplates not performing a shutdown task and instead sending the task to a non-volatile queue to be performed later. In fact, this scenario is non-sense for shutdown tasks -- there is no point in saving a shutdown task for performance after shutdown.

Any "Task" In Spears Is Not Queued Before Determining A Change In Power Supply.

Claim 1 has been amended to make it more clear that the queued task was placed in the queue for the peripheral device before it is determined that electrical power is changing from on to off. To the extent the shutdown tasks in Spears might somehow be deemed to be in a task queue for the computer that will be shut down, they clearly are not placed in any such queue until after it is determined that there is a power failure or other event triggering a shutdown.


Spears Does Not Teach Or Suggest A Peripheral Device.

A peripheral device is commonly understood to mean a device such as a mouse, keyboard, printer, monitor, scanner, etc. that is not part of the essential computer, as is the memory and microprocessor. See, for example, Webopedia definition of peripheral device (www.webopedia.com/TERM/p/peripheral_device).

Spears is directed to shut down procedures for "an information handling system such as a network computer system, or the like...." Spears, column 1, lines 51-52. The specific embodiments described in Spears relate to "a network server 110 interconnected with one or more workstations 112, 114 & 116 ... both the server 110 and each individual workstations 112, 114 and & 116 are complete, stand alone information handling systems such as, for example, a minicomputer, a mainframe computer, or a personal computer" Spears, column 2, lines 59-67. There is nothing in Spears that even remotely suggests any of the techniques disclosed therein for system shut down might be applicable to print jobs for a printer or other peripheral device tasks.

For some or all of these same reasons, the other claims now pending are also felt to distinguish patentably over Spears alone or Spears in view of Bender.

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